

Comparison of pre- and postoperative parathyroid hormone levels with frozen section during parathyroidectomy

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*Abstract

Background: Due to the short half-life of parathyroid hormone (PTH), intra-operative quick PTH measurement (immediately after removal of adenoma) is beneficial to identify and evaluate the adequacy of tissue removal and to reduce reoperation and more extensive surgery.

Objective: The aim of this study was to compare pre-and postoperative parathyroid hormone levels with frozen section during parathyroidectomy.

Methods: This analytical study was conducted on 25 patients with primary hyperparathyroidism referred to Velayat Hospital in Qazvin for parathyroidectomy during 2013. Serum PTH levels were measured before surgery and 10 minutes after surgical removal of adenomas and the results were compared with the results of frozen section during surgery. Data were analyzed using paired T-test.

Findings: Mean PTH level was 222 ± 68.5 before surgery and was 56 ± 57.7 after removal of the adenomas. The difference was statistically significant. These results were consistent with the results of frozen section.

Conclusion: With regards to the results, it seems that frozen section technique is an appropriate method to assess the surgery and to reduce the extent of surgery.

Keywords: Frozen Sections, Parathyroid Hormone, Parathyroidectomy

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